Conference track «Artificial intelligence and digital transformation in business and public administration»

ESG AND CONSUMER CHOICE: MEDIATING ROLE OF DIGITAL TECHNOLOGIES

Научный руководитель – Zhanna Belyaeva zh.s.

Onewo T.T.[1], *Gerard N.C.*[2]

1 - Уральский федеральный университет имени первого Президента России Б.Н.Ельцина, Высшая школа экономики и менеджмента, Екатеринбург, Россия, *E-mail: tonevo@urfu.me*; 2 - Уральский федеральный университет имени первого Президента России Б.Н.Ельцина, Высшая школа экономики и менеджмента, Yekaterinburg, Россия, *E-mail: nathalie_gerard@outlook.com*

E

In 2015, the United Nations announced the 2030 Agenda for Sustainable Development. To achieve this goal, the sustainability performance of any organization is assessed using the ESG (environmental, social, and governance) approach. (Naffa & Fain, 2020). Ever since then ESG considerations have become a key part in organizations' operations, production and marketing processes. This may be due to the increasing ESG awareness of consumers, societal safety concern, and demand for improved corporate governance. Furthermore, the internet technology era came with a lot of advantages which include speed, accuracy, measurability and ease of operations. Hence, industries are changing from traditional way to digitalized way of doing business. Digital technologies including artificial intelligence (AI), social media, data mining, cloud computing, IoT, block chain, etc. play a vital role in aiding businesses' ESG practice and performance. They facilitate ESG measurement, orientation, reporting, investment, analysis and improvement. (Kwilinski, et al. 2023).

The combination of ESG and digitalization play a crucial role in influencing consumer brand choice. The direct influence of these two concepts on general organizational performance has been studied by different authors, especially on quantitative aspects of performance. However, there is little or no research on how the combinations of these strategies influence consumer brand choice. Hence, the main purpose of this research is to investigate the mediating influence of digitalization on ESG and consumer choice. Different authors have examined the interplay of different technologies with ESG; Sætra (2023) argues that the AI ESG combination can assist ESG assessment and disclosure. D'Amato et al. (2022) utilized a machine learning approach to assess the effect of financial balance sheets on the ESG score. Landaluce et al. (2020) explains that IoT devices facilitate the collection of real-time data for ESG assessment. Liu et al. (2021) assert that a block chain-based framework can be helpful for ESG evaluation. Furthermore, Big Data has been widely used for ESG reporting (Lee & Kang, 2016). Most of these authors focused on how the digitalization and ESG combination affect internal business processes or ESG measurement and evaluation. However, the focus of this research is to see how this intersection helps to attract and retain consumers.

Digitalisation can help customers notice, engage, react and respond to business ESG initiatives. In terms of environmental factors, digital technologies help cultivate environmental awareness of consumers, and ensure organizational environmental innovation (Varadarajan, 2020). In terms of social ESG aspects, fostering businesses to fulfill their social responsibilities digital technologies facilitate shareholders engagement, promote information disclosure quality, online shopping etc., and drives companies to fulfill their social obligations truly (Wade & Shan, 2020). By establishing digital platforms, companies can facilitate close communication and collaboration between stakeholders, improve feedback, have effective customer reach and engagement and optimize overall management. (Varadarajan et al., 2022). Also, the introduction of digital products like electronic payments can provide greater inclusivity and convenience for society. Regarding corporate governance, digital technologies enhance the transparency of internal management and improve a company's accountability system. This will in turn increase customer trust and loyalty.

Integrating digital technologies like IOT, AI, and social media into every facet of a business, fundamentally alters the firm's operation and value delivery to customers (Vial, 2019). IoT enabled labels can provide consumers with real time information about a product's environmental impact, such as carbon footprint, water usage or recyclability. It can also help recommend ecofriendly products to customers and connect consumers with suppliers that adhere to sustainable and responsible practices. Social media platforms can facilitate ESG awareness, education, and consumer engagement, influencing purchasing decisions. With social media, customers can communicate directly with companies, making sharing data easier. Additionally, it makes businesses aware of and enhance their social reputation. Organisation's use social media to disseminate information and reduce misinformation. This reduces knowledge asymmetry and boosts the effectiveness of corporate governance. AI-powered audit trails and financial transparency increase customers' confidence in a company's governance. Also, companies' use of AI for transparent stakeholder engagement and promotional content influences brand choice. By leveraging digital technologies, consumers can make more informed purchase decisions.

This paper rests on Freeman's stakeholders and roger's diffusion of innovation theory. The stakeholder theory posits that a firm's long-term value is based on its relationships with critical stakeholders (shareholders, creditors, consumers, suppliers, government, society, and other parties). Drawing upon the diffusion of innovation theory, the proliferation of digital technologies spurs enterprises to adopt innovative management and operational paradigms, which in turn elevates their overall ESG profile. The essence of digital technologies lies in its profound impact on both internal processes and external interactions. By integrating advanced digital technologies, businesses can streamline their operations, give publicity to their ESG initiatives, improve efficiency, and reduce resource waste and energy consumption. This optimization not only enhances a company's ESG capabilities but also strengthens its commitment to social responsibility. Additionally, digital technologies can enable businesses to shift toward service-centric models by leveraging innovative technologies. As companies adopt a more service-oriented mindset, they place greater emphasis on product quality, brand reputation, and external image. Through digitalization, businesses are increasingly likely to consider their social and environmental impacts, adopting practices and strategies that align with ESG standards. These innovations not only boost a company's ESG performance but also enhance customer patronage, loyalty and corporate goodwill.

The intersection of ESG and digitalized technologies on customer choice is the focus of my ongoing research. The research seeks to test the following hypotheses:

i. There is no significant relationship between ESG practices and customer choice

ii. There is no significant influence of digital technologies on customer choice

iii. Digital technologies do not mediate the relationship between ESG and customer choice

The methodology of this research will utilize descriptive design, and primary data. The online questionnaire will be filled out by graduate and postgraduate students at Ural federal university selected via purposive sampling technique. Linear regression, multiple regression and sobel tests will be used to test the study hypotheses. It is expected that digital technologies will significantly mediate the relationship between ESG factors and consumer choice. To the best of the author's knowledge, this study makes the first attempt to provide evidence of how digital technologies can be employed as a mediating variable on the relationship between ESG practices and consumer choice, especially among the selected sample.

References

References

1) D'Amato, A.W., & Littlefield, C.E. (2022). Identifying trade-offs and opportunities for forest carbon and wildlife using a climate change adaptation lens. A journal of the society for conservative Biology. 4(4), 20-44 https://doi.org/10.1111/csp2.12631 Kwilinski A., Oleksii L., & Pimonenko T., (2023). The role of country's green brand and digitalization in enhancing environmental, social, and governance performance. Economics and Environment 87(4):1-22 DOI: 10.34659/eis.2023.87.4.613 Landaluce, H., Arjona, L., Perallos, A., Falcone, F., Angulo, I., & Muralter, F. (2020). A Review of IoT Sensing Applications and Challenges Using RFID and Wireless Sensor Networks. Sensors, 20(9), 2495. Lee, J.-G., & Kang, M. (2016). Geospatial big data: Challenges and opportunities. Big Data Research, 2(2), 74–81. Liu, W., T. Ye, J. Jägermeyr, C. Müller, S. Chen, X. Liu, & P. Shi, (2021). Future climate change significantly alters interannual wheat yield variability over half of harvested areas. Environ. Res. Lett., 16, no. 9, 094045, doi:10.1088/1748-9326/ac1fbb Naffa, H., & Fain, M. (2020). Performance measurement of ESG-themed megatrend investments in global equity markets using pure factor portfolios methodology. PLoS ONE, 15. Rajan Varadarajan, 2022. "A general theory of marketing: Conceivable, elusive, or illusive," AMS Review, Springer;Academy of Marketing Science, vol. 12(3), 177-183 Sætra, H.S. & Selinger, E. (2023). Technological Remedies for Social Problems: Defining and Demarcating Techno-Fixes and Techno-Solutionism (September 19, 2023). Available at http://dx.doi.org/10.2139/ssrn.4576687 Varadarajan, R. (2020). Customer Information Resources Advantage, Marketing Strategy and Business Performance: A Market Resources Based View. Industrial Marketing Management, 89, 89-97. https://doi.org/10.1016/j.indmarman.2020.03.003 Vial G. (2019). Understanding digital transformation: A review and a research agenda. The Journal of Strategic Information Systems 28(2), 118-144 Wade, M., & Shan, J. (2020). Covid-19 Has Accelerated Digital Transformation, but May Have Made it Harder Not Easier. MIS Quarterly Executive, 19(3).